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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,519	06/05/2001	Nobuhiro Koike	P 5379b	8176
20178	7590	03/07/2005	EXAMINER	
EPSON RESEARCH AND DEVELOPMENT INC INTELLECTUAL PROPERTY DEPT 150 RIVER OAKS PARKWAY, SUITE 225 SAN JOSE, CA 95134			GOODWIN, JEANNE M	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/830,519		KOIKE ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Jeanne-Marguerite Goodwin		2841	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21, 22, 25, 27, 31-33, 35, 38, 39, 81, 82, 85, 88-90, 92, 95, 96 and 98 is/are rejected.
- 7) ☒ Claim(s) 23, 28-30, 36, 37, 40, 42-49, 51-57, 59-65, 67-73, 75-80, 83, 86, 87, 93, 94 and 97 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

Continuation of Disposition of Claims: Claims pending in the application are 21-23,25,27-33,35-40,42-49,51-57,59-65,67-73,75-83,85-90 and 92-98.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 21 is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,422,739 to Hara et al. [hereinafter Hara].

Hara discloses a timepiece comprising an electromagnetic transducer/generator (20) for converting one form of energy into another form of energy, the electromagnetic transducer (20) comprising first (22) and second (21) coils having first and second winding cores (23) respectively; wherein the second coil (21) appears to be disposed closer to an outer periphery of the timepiece than the first coil (22), and the first coil (22) has a winding core whose axial length appears to be the same as that of a winding core of the second coil (21).

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3. Claims 21, 22, 25, 27, 31, 32, 81, 82, 85, 88, 89 and 98 are rejected under 35 U.S.C. 102(e) as being anticipated by EP Patent 905,587 to Takahashi et al. [hereinafter Takahashi].

Takahashi discloses a timepiece comprising an electromagnetic transducer/generator (30) for converting one form of energy into another form of energy, the electromagnetic transducer (30) comprising first (33) and second (34) coils inherently having first and second winding cores respectively; wherein the second coil (34) appears to be disposed closer to an right outer periphery of the timepiece than the first coil (33) and the first coil (33) has a winding core whose axial length is longer than that of a winding core of the second coil (34) as stated in claim 21. Further the diameter of a winding wound around the second winding core is less than a diameter of a winding wound around the first winding core (see figure 2) as stated in claim 22. Further inherently the conductivity of the winding of the coil (34) being smaller in wire diameter is larger than the conductivity of a winding of the coil (33) being larger in wire diameter as stated in claim 25, wherein the width and thickness of the second winding core is less than the width and thickness of the first winding core as stated in claim 27; wherein the second coil (34) is shaped such that its axial dimension is substantially parallel to the right outer periphery as stated in claim 31. Takahashi's device further comprises a back cover/main plate (3) wherein the second coil (34) is disposed closer to the right outer periphery of the timepiece than the first coil (33), so that the second winding core is located a greater distance from the back cover/main plate (3) than the first winding core as stated in claim 32. Takahashi's electromagnetic transducer (30) further comprises a rotor (12), and a stator comprised of first and second stator portions (31, 32), the first stator portion (31) including the first winding core

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and a corresponding first winding and the second stator portion (32) including the second winding core and a corresponding second winding, the first and second stator portions (31, 32) being integrated through their respective winding cores as stated in claims 81, 82, 85, 88-90, 92 and 95. Moreover the volume of the second winding core would inherently be smaller than the volume of the first winding core as stated in claim 98.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 33, 35, 38, 39, 90, 92, 95, and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of US Patent 6,016,289 to Kaelin [hereinafter Kaelin].

Takahashi discloses a device as stated above with regards to claims 21. Takahashi discloses all the subject matter claimed by applicant with the exception of the limitation stated in claims 33, 35, 38 and 39, i.e., the timepiece further comprising an oscillating weight rotating in a circumferential direction with respect to the outer periphery.

With respect to the limitation stated in claims 33, 35, 38 and 39: Further, Takahashi's timepiece comprising an electromagnetic transducer/generator (30) further comprises an electronic circuit (240) being composed of an oscillating circuit (242). Kaelin discloses a timepiece comprising a power generator (1) being driving by a chain (3) including an oscillating

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weight (2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the oscillating circuit of Takahashi, by the drive chain including the oscillating weight, since both are alternative types of driving means which will provide the same function, if one is replaced with the other, of driving the power generator, respectively. Furthermore, the combination of Takahashi and Kaelin' electromagnetic transducer (30) further comprises a rotor (12), and a stator comprised of first and second stator portions (31, 32), the first stator portion (31) including the first winding core and a corresponding first winding and the second stator portion (32) including the second winding core and a corresponding second winding, the first and second stator portions (31, 32) being integrated through their respective winding cores as stated in claims 90, 92, 95 and 96.

#### *Allowable Subject Matter*

6. Claims 23, 28-30, 36, 37, 40, 42-49, 51-57, 59-65, 67-73, 75-80, 83, 86, 87, 93, 94 and 97 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 disclose related devices. US Patent 3,621,313 to Walton and US Patent 6,437,466 to Taghezout devices comprises an eletromechanical energy converter.

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8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (571) 272-2104. The examiner can normally be reached on Monday-Friday (9am-6pm), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2861.

JMG  
Feb. 22, 2005

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SUPERVISORY PATENT EXAMINER  
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PHUONG T. VU  
PRIMARY EXAMINER